#11

An Essay

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On

Acute Hospitality

by

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Acute Hepatitis

The Liver, like the lungs, or any other internal organ is liable to take on active, or acute inflammation. The inflammation of this as of other organs is ushered in with fever preceded by chilliness, paleness of countenance, shrinking of the external parts, and a small, quick, and chorded pulse.

In proportion to the intensity of the chilly or cold stage, will be the subsequent reaction.

There soon comes on great heat, with pain in the right Hypochondriac region, that pain often extends up as high as the Clavicle, and shoulder, but this is not a necessary attendant on Hepatitis, for it may be present without any affection of the liver, or this organ may be on a diseased state independent of the presence of this symptom.

The patient generally experiences great uneasiness

while lying on the left side, though it is to be considered an extremely fallacious Diagnostic symptom, for not unfrequently the pain extends across to the left Hypochondrium, and the easiest position is the back, as was the case with Doct. Johnson while labouring under this disease.

Hepatitis is often attended with a tickling, dry cough, particularly if that part of the liver be affected, which is situated in contact with the Diaphragm, and the existence of a cough together with difficulty of respiration has often led practitioners to believe that the disease was seated in the lungs, or their investing membranes, when in reality they were in a perfectly healthy state. It is however not an uncommon circumstance for the right lung to be simultaneously affected with inflammation, constituting a complication of

Pneumonitis, and Hepatitis. There is also nausea, and sickness of the stomach, frequently attended with vomiting of bilious matter. The Urine is scanty, and high coloured, depositing a lateritious sediment. This appearance of the urine is not peculiar to Hepatitis, but is common to other febrile diseases. There is loss of appetite, great thirst, the skin is hot, and dry, the tongue is coated with a white, sometimes a yellowish fur, the bowels are generally found in a constipated state, occasionally in a state of Dysenteric irritation, evincing either a deficiency, or a vitiation of the biliary secretion. If the disease is not arrested by a vigorous plan of treatment, in a few days the skin, and Tunica Conjunctiva become tinged with Yellow, the whole countenance putting on a jaundiced appearance. The focal evac-uations are clay coloured, showing that the

healthy functions of the liver are considerably impaired.

There is a circumstance noticed by Doctor Johnson, which has been passed over by most writers on this subject, that is the state of the mind. He observes that the mental function is more perturbed in Hepatitis, than in any other species of inflammation, excepting the brain itself be affected. This may be accounted for, partly, from the strong sympathy, existing between the brain, and liver, and that a suspension, or derangement in the biliary secretion, exerts a peculiar influence on the brain.

Doct Cullen observes that the acute form of the disease is confined exclusively to the investing membrane of the liver, and that whenever the Parenchymatous structure becomes affected the disease always assumes a chronic

character. Reasoning not only from analogy. but from the readiness with which inflammation of this organ runs into the suppurative stage, and form, abscesses in the substance of the liver, we readily infer that the structure of this important viscus, is as liable to active or acute inflammation as any other Glandular structure in the human body. Innumerable instances are on record, indeed, I may say, we have almost daily instances of some Gland or other in the human Machine taking on active inflammation. A fairer illustration of this fact cannot be adduced than the Syphilitic Bubo. The Inguinal Glands readily take on active inflammation, and run into suppuration, unless arrested by the most vigorous Antiphlogistic plan of treatment.

Diagnostic Symptoms. In the incipient

stage of this disease, the distinguishing of Hepatitis from inflammation of any of the contiguous viscera is of little consequence to the Physician, since the speedy reduction of vascular excitement, by copious venesection, is the only remedy to be relied on in Hepatitis, or in inflammation of any other part of the system. But, after this is effected, it then becomes of the almost importance to the successful practitioner to discriminate between inflammation of the liver, and inflammation of any of the contiguous viscera, for, unless a proper distinction be drawn, his practice must be uncertain, and empirical.

The disease now under consideration may in general be distinguished from Pneumonia, by gradual inspiration not augmenting the pain in the liver, as it does when any of the thoracic

viscera are affected; while the pain is felt much more sensibly, by pressure under the margin of the floating ribs. The cough, and difficulty of respiration, are coeval with Pneumonic inflammation, while they always succeed Hepatic inflammation, and are not accompanied with expectoration. From inflammation of the stomach, it may generally be distinguished, by the absence of that Gastric irritability, and sensibility which render Gastritis so dangerous, and distressing a complaint. In Hepatitis the patient is mostly enabled to retain any thing taken into the stomach (for a time at least) but the reverse of this is the case in Gastritis. It may also be known by the febrile symptoms not assuming that Typhoid type which is so characteristic of inflammation of the stomach.

From spasm of the Gall duct (which is caused

by impacted calculi it may be discriminated by the vehemence of the febrile symptoms, and many other circumstances, but as this is considered as one of the causes of Hepatitis, and do requires no difference of treatment, there is less necessity for establishing the distinction between them.

The appearance of the fæces, and of urine indicate derangement of the liver, with more constancy, and certainty, than of any other of the Abdominal viscera. Although the lateritious sediment deposited by the urine is not an unfrequent occurrence in inflammation of some other internal organ, yet its peculiar appearance will materially contribute in assisting to form a correct Diagnosis of the true nature of the disease.

Diseased appearances of the Liver. Dissections reveal to us the liver, and its investing membrane in various states, and different degrees

of derangement. When inflammation occurs in the membrane of the liver, it presents exactly the same appearances as is met with in the Peritoneum, of which it forms a part in a similar condition. It is generally found after death (if there was previous inflammation) much thicker than in the healthy state. It is crowded with minute vessels carrying red blood. There is also found on its surface a layer of coagulable lymph, which contributes a good deal to its thickness, and whenever the secretion of this lymph, is in sufficient quantity, it forms connections more, or less completely between the liver, and contiguous parts.

It is more common to find upon Dissections these adhesions (which are the result of previous inflammation) than to find the membrane itself in an inflamed state.

The parenchymatous structure is sometimes, though rarely, found in a state of inflammation, notwithstanding there was no symptom developed during life that would indicate such a condition of the liver, excepting the jaundiced appearance of the skin. This appearance is caused most probably, by the pressure that is made on the Ductus Biliari by the swelling of the surrounding parts.

The adhesions found between the liver, and adjacent parts, are nothing more than the coagulable lymph, which is secreted by the membrane during its inflammatory stage, and by its organization is converted into a transparent membrane, and it is this membrane, that forms the medium of connection between the liver, and the parts that lie contiguous. This junction may either be general over an extended surface of the liver,

or it may consist of a number of processes of adhesion.

These adventitious membranes vary considerably in their length, sometimes they are long, at other times the connection is very close. The most common place, where these adhesions are to be found, is on the anterior part, by which it is connected to the Peritoneum lining the abdominal muscles at their superior part. But, not unfrequently, we find adhesions between the liver, and Diaphragm, the liver, and stomach, the liver, and Duodenum, and occasionally, it is found adhering to the Arch of the Colon.

The principal use of these adhesions, is to prevent the escape of pus into the general cavity of the Abdomen when an abscess is formed in the liver, and to afford a safe outlet either through the Intestinal Canal or by

expectoration from the lungs, that is when the abscess is situated on the convex surface of the liver. If the abscess points externally (which may be detected by the feel if the patient is emaciated, and the parietes are thin) it may be opened by a lancet, or any other suitable instrument. Thus the patient's life is less endangered, and ultimately a cure may be effected, provided the constitution has not suffered too much by previous disease.

Dissections also show the liver studded with tubercles of various sizes, and consistence some are firm, small, of a white, or yellowish colour, of a rounded figure, and are to be found in clusters occupying the whole substance of the liver, others are large, and soft, of a white, or dark brown colour, and are generally distinct from each other. Unfortunately there are no symptoms developed during life, by which

their existence can be detected, but in some rare instances they may be discovered by the feel when the patient is thin, and emaciated. Even if their existence were ascertained the present mode of treatment can only be palliative. Their entire removal is yet to be considered a desideratum and beyond the resources of the healing art. Here we have to regret the present imperfect state of our science, but may we not look forwards, and a hope be entertained that a happy aera may arrive when the womb of futurity shall disclose to us a remedy for all those diseases which have hitherto been considered incurable, or which have as yet eluded the researches of medical men.

Hydatids are frequently found on the liver, but what has been said of Tubercles is equally applicable to this morbid derangement. The liver is also found not unfrequently in an

indurated, or scirrous state this however is the result of Chronic Hepatitis.

Causes. The causes may be divided into predisposing, and exciting. Many of the predisposing, and exciting causes, are the same as those which lead to Pneumonia, as a plethoric habit, partial application of cold to the body when heated, or fatigued, standing on cold ground, causing a sudden check of perspiration. But, there are some causes more peculiarly connected with Hepatic, than any other species of inflammation. Of the predisposing may be mentioned, choleric, or irritable dispositions, which affords a corroborative proof of the strong sympathy that exists between the brain, and liver.

The exciting causes are either external, or internal. It is universally acknowledged that a high range of temperature exerts considerable

influence on the Hepatic system, through the medium of the skin: And we need not be at a loss to imagine how this happens, when we take into consideration the indirect depressing powers of heat. It is well known, that its first effect is to augment the Cutaneous and Biliary secretion, but by a long continuance of heat, the vessels by which this secretion is carried on, become debilitated, and are now easily struck torpid on the sudden application of cold. This torpor at first is only temporary, but, by too frequent repetition of the same cause, the energy of the Hepatic system is weakened, and congestion takes place, consequently inflammation is the result.
This disease is also caused by violent exercise, by intense Summer heats, by long continued Intermittent, and Remittent fever, by high living, and the ingurgitation of inebriating

liquors, particularly ardent spirits, and by various solid concretions on the substance of the liver. Derangements of the digestive functions, suppressed secretions, inflammation, or compression of the brain, mental solicitude, and the various mechanical injuries as blows, contusions &c, may be considered as frequent causes of obstructions, and disease of the liver. Of all the causes enumerated above, none are half so productive of this disease, as the partial application of cold to the body when heated, or fatigued, excepting of course those instance, when the disease is brought on by blows, or external violence. An intemperate use of ardent spirits, cannot be considered an active agent in producing Acute Hepatitis though chronic derangement, particularly of function, is frequently induced by those injurious potations.

Treatment. From the violence of the symptoms, the degree of Pyrexiae, and the readiness with which inflammation of this organ runs into suppuration, the most energetic practice is called for to prevent an unfavourable termination. To combat the disease we must by every means in our power endeavor to overcome the general excitement, and remove the local inflammation. To effect this important purpose, copious venesection from the arm, and cupping, or leching the region of the liver, are chiefly to be relied on. Both general, and local bleeding should be carried to an extent, not warranted scarcely in any other disease. Cupping seems to be preferable to leching, because we can command a more copious abstraction, and in a shorter time with the one than with the other. Blisters are to succeed the local bleeding, and a succession

seems to answer a better purpose, than keeping the first one open by means of the Savin Ointment, or any other stimulating dressing. While five, or six grains of Calomel, combined with three, or four grains of the Extract of Colocynth, should be given, followed by Senna, and Salts so as completely to evacuate the Intestinal Canal. If these remedies fail in determining to the surface, one, or two grains of the Pulvis Antimonialis may be added to each dose of the Calomel.

Purging in Hepatitis seems to fulfill a twofold indication. 1st It assists in reducing the Plethora of the Portal circulation. 2d As the thinner part of the bile is probably taken up by the absorbents, the Ductii Biliari, and excretory ducts, are filled with the more viscid portions, and by the administration of drastic purgatives, action in these tubes is excited, consequently the viscid matter is expelled, and the

healthy action of the liver will be restored.
Hence the propriety of keeping up a regular,
and constant action in the liver, and digestive
organs for some time. The action however of these
Cathartics should be limited to two, or three
copious evacuations daily.
After the intestinal canal is freed of its acrid,
and irritating contents, and vascular excitement
is reduced, our next object should be to attempt
a restoration of the natural, and healthy
secretion of the liver, which will be the surest
safeguard against future lesion either of
function, or structure, in this important
viscus. To accomplish this end we must call
to our aid the revolutionary powers of
mercury. It is well known to every practitioner
that no article either of the vegetable, or
mineral kingdom exerts half so powerful an
influence on the Glandular System as this

medicine. To obtain its beneficial effects in this cases, it should be given in small doses, say one grain three times a day, combined with one eighth of a grain of Opium in the form of pill which is to be continued until a gentle Ptyalism is induced. The use of the Opium is to prevent the Calomel from passing off by the bowels, for the desired effect will not be obtained, if a full Catharsis be produced. If it is desirable that a speedy salivation should be brought on the mercurial ointment may be rubbed in over the region of the liver, or if the friction here produces too much pain, the Groin, or Axilla will be the most suitable places for the mercurial friction. Whenever there is a coppurish taste in the mouth a mercurial fetor of the breath, or a spungy redness of the Gums, the exhibition of mercury should be discontinued, until the symptoms disappear

when the pills should again be exhibited, and continued until exactly the same effects are produced, and in this manner the system is to be kept gently under the influence of its power a longer, or a shorter period according to the violence of the symptoms. If there is no structural derangement, a shorter time will suffice, but, if the disease has been allowed to run on, and we are apprehensive that some disorganization has taken place, this mode of treatment is to be continued for six, or eight weeks, or longer if necessary.

If, by the means suggested above, there is an alleviation of the symptoms, and the secretory action of the skin, and liver is restored, the Prognosis is favourable, but, on the contrary, if there is little abatement of the violence of the symptoms, and the skin remains hot, dry, and constricted, we may augur an

unfavourable termination. Here it is, that the warm Bath, if judiciously applied, from its well known efficacy in equalizing the circulation, and determining to the surface, promises to be useful. There are other remedies of minor importance, some of which have been recommended very highly in the cure of Hepatitis, particularly the Nitro-muriatic Bath, which in my opinion, is entitled to more confidence, than it has hitherto received from the practitioners in this country. The Nitric Acid largely diluted, I have seen given with decidedly beneficial effects.

As regards Tonics, I have but few words to say. After the Phlogistic Diathesis has been overcome, and the patient is much exhausted, the various vegetable Bitters, and Chalybeate preparations may be used with advantage. Diet. As in every species of inflammation

the whole Antiphlogistic plan of treatment is to be rigorously pursued, consequently the diet should consist of the farinaceous articles, or rather gruel, Barley water, Toast and water &c. The thirst at the commencement is very considerable, which should be assuaged by cooling drinks, impregnated with the vegetable acids, as Lemonade, Tamarind water &c. Ripe fruits may be allowed in moderate quantities. The room is to be well ventilated, and the bowels kept in a soluble state.

It may not be improper here to remark, that, if the mode of treatment already laid down should succeed in overcoming the disease, the Prophylactic mode of treatment consists in carefully avoiding all the exciting causes, more especially any exposure to cold. Flannel is to be worn next the skin, so as to keep up a regular, and constant action on the surface in order to prevent a return of the disease, the

diet should consist of such articles as are easy of Digestion, and not liable to fermentation, every thing of an acrid, or irritating nature is to be prohibited, particularly all fermented, or spirituous liquors. Wine taken in moderate quantities, largely diluted with water, may not be productive of much mischief, but Water alone constitutes the best beverage, for a convalescent from an attack of acute Hepatitis.